

Kashyap
Serial no. 09/917,464
Filed 7/27/2001
Attorney docket no. BEA920010014US1

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REMARKS

Note regarding submission date of office action response

The three-month date of the office action was November 13, 2004. However, because November 13, 2004, falls on a Saturday, the filing of the present office action response on the immediately following business day, November 15, 2004, renders the filing timely without the need for extensions of time.

Claim rejections under 35 USC 101

Claim 16 has been rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter. In particular, claim 16 should be directed to a computer program stored on a computer-readable medium and executing on a computer. Applicant has made appropriate amendments to claim 16, as well as to claims 17-18, and therefore requests that this rejection be withdrawn.

Claim rejections under 35 USC 102

Claims 1-20 have been rejected under 35 USC 102(e) as being anticipated by Antes (2003/0018813). Applicant very respectfully submits that there has been a misunderstanding as to some terminology used in the claims, and as to how that terminology has been interpreted in view of Antes. In particular, Applicant submits that there has been confusion as to what "multicasting" is, where the salient part of the claimed invention is that a multicast address or a multicast port is used in a novel manner for failover purposes. Against a correct understanding of what multicasting is, Applicant submits that Antes does not anticipate the claimed invention.

Multicasting is a very specific type of network transmission. In the "Computer Desktop Encyclopedia" article that is referenced in the co-filed Form 1449, multicasting is defined as follows:

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In communications networks, to transmit a message to multiple recipients at the same time. Multicast is a one-to-many transmission similar to broadcasting, except that multicasting means sending to specific groups, whereas broadcasting implies sending to everybody.

So, in multicasting, you send a message once, and it is automatically received by *all* the recipients of a multicast group. The claimed invention leverages this aspect of multicasting in a novel manner provide for node failover.

Applicant submits that Antes does not disclose multicasting, however, and therefore cannot anticipate the claimed invention. For example, in paragraph [0074], Antes describes how it handles communications sent by a client to a single IP address:

The distributing processor 50 may perform workload management and may distribute connections to a single IP address to *one* of the servers 52, 54, or 56 such that the client 10 may communicate with any of the servers 52, 54 or 56 utilizing the single IP address as a destination address.

That is, the single IP address of Antes is not a multicast address – when the client 10 sends a communication to the single IP address, the communication is not automatically received by all of the servers 52, 54, or 56. Rather, the communication sent by the client 10 is received by one (i.e., any) of the servers 52, 54, or 56, and not all of them. That is, the distributing processor 50 performs workload management, distributing connections to the single IP address among the servers 52, 54, and 56. For example, the server 52 may receive the first connection to the single IP address, the server 54 may receive the second connection to the IP address, the server 56 may receive the third connection to the address, the server 52 may receive the fourth connection, and so on. In this way, the distributing processor 50 manages the workloads of the servers 52, 54, and 56 by ensuring that none of the servers is overwhelmed, such that the workload is distributed among all of the servers. The single IP address of Antes is not a multicast address, because communications sent to the address are not always communicated – i.e., are not *multicast*ed – to all of the servers 52, 54, and 56.

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Workload management as disclosed in Antes is thus very different than and not the same as multicasting, to which the claimed invention is limited. Workload management allows for node (i.e., server) failover, as disclosed in Antes, by having the distributing processor 50 not send communications to nodes that have failed. By comparison, the claimed invention leverages the way multicasting works so that failover is provided. The novelty of the invention lies in using multicasting for failover, or, stated another way, in achieving failover by using multicast addresses. Therefore, Antes does not and cannot anticipate the claimed invention. Indeed, multicasting is a very specific term as used in the art – since Antes does not use the term multicasting, and in fact describes something other than multicasting, it cannot be said to disclose multicasting.

As one final note on the workload management approach of Antes, Applicant has submitted in the co-filed Form 1449 another reference that discusses the type of workload management that Antes uses. This reference is “Maximizing web site availability.” On page 12 of the reference, the following discussion is provided:

The basic tenant is to provide a common addressing scheme to various underlying components. *For example, a load balancer/IP sprayer provides a single IP address/name for a group of servers.* The load balancer/IP sprayer routes request to the appropriate server within the cluster. End users only need to address their requests to the published IP resource; the load balancer determines which server should handle the request. The load balancer should also be able to determine when a server in its cluster is functioning (or not), and route requests *only* to functioning servers.

Again, compare this type of workload management, consistent with that of Antes, with multicasting, in which a request is transmitted to *all* the servers having a multicast address, and not just *selected* servers (as few as one server) receiving the request. Antes describes a type of network addressing and failover scheme that, although functional, is very different than that of the claimed invention, and therefore does not anticipate the claimed invention.

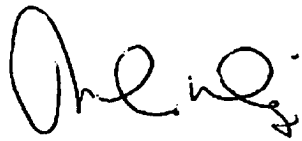
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Conclusion

Applicants have made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Applicants' Attorney so that such issues may be resolved as expeditiously as possible. For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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Date

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